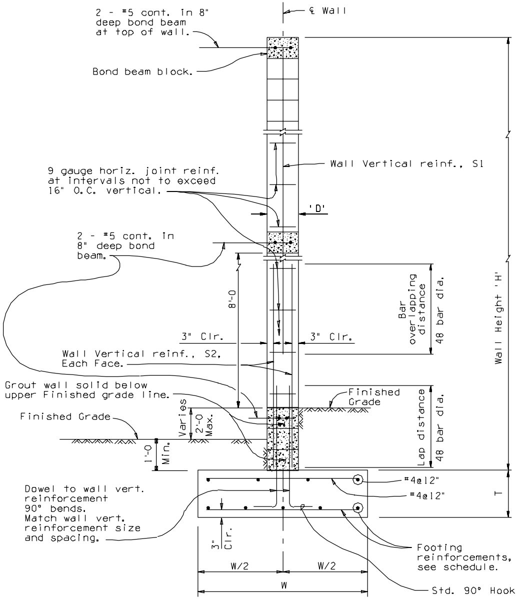
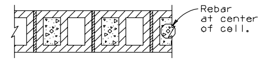
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



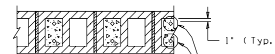
2 - #5 cont. in 8" deep bond beam at top of wall.
℄ Wall
Bond beam block.
Wall Vertical reinf., S1
9 gauge horiz. joint reinf. at intervals not to exceed 16" O.C. vertical.
'D'
2 - #5 cont. in 8" deep bond beam.
8'-0
Bar overlapping distance
48 bar dia.
Wall Height 'H'
3" Clr.
3" Clr.
Wall Vertical reinf., S2, Each Face.
Grout wall solid below upper Finished grade line.
Finished Grade
Finished Grade
Varies
2'-0 Max.
1'-0 Min.
Lap distance
48 bar dia.
#4@12"
#4@12"
T
Dowel to wall vert. reinforcement 90° bends. Match wall vert. reinforcement size and spacing.
3" Clr.
Footing reinforcements, see schedule.
W/2
W/2
W
Std. 90° Hook

TYPICAL WALL SECTION

(For Wall Height 18'-0 to 26'-0)



SECTION THROUGH S1



SECTION THROUGH S2

TYPICAL SECTIONS THROUGH VERTICAL WALL REINFORCEMENT

NOTE:

See DWG. SD 8.02 (1 of 2) "WALL DETAILS AT JOINTS AND ENDS" for details not shown here.

GENERAL NOTES: (Continued)

Special Inspection Notes:

Special inspection and testing, provided by the Department, are required for the masonry noise wall stem to assure quality materials and construction.

(A) Pre-construction:

1) Verify correct block type to be used.
2) Verify correct mortar and grout to be used.
3) Verify the location, spacing, size and lap length of vertical reinforcing dowel bars and wall reinforcement that is within plus or minus ½" of the plan dimension as measured normal to the wall and plus or minus 2" in the longitudinal direction.
4) Verify that masonry units are clean and free from dirt when placed in the wall. Masonry units shall be dry before placement.

(B) Construction:

1) Observe, periodically, the placement of the masonry units and the making of the mortar. Verify that the initial bed joint thickness is not less than ¼" or more than 1"; subsequent bed joints shall not be less than ¼" or more than ⅝" in thickness.
2) Observe all grout placements.
3) Verify horizontal joint reinforcing size, location, and spacing.
4) Verify that all concrete masonry units are placed in uniform and true course, level and plumb with a tolerance of ¼" in 8', non-cumulative.
5) Verify that concrete masonry units are placed to the desired height with joints of uniform thickness. Level, plumb and straighten before the mortar stiffens. Bond shall be plumb throughout.
6) Verify that all concrete masonry units are cured by sprinkling twice a day for minimum of 2 days.

WALL SCHEDULE

Wall Height H	Wall* Thick-ness D	Footing Depth T	Footing Width W	Reinforcing: Wall, Vertical: S1 Size & Spacing	Reinforcing: Wall, Vertical: S2 Size & Spacing	Reinforcing: Footing: Trans-verse	Reinforcing: Footing: Longi-tudinal	Min. Req. Allowable Soil Bearing Capacity (psf)
18'-0 to 19'-11	12"	1'-9	6'-0	#5@16"	#5x6'-6 @ 16"	#5@12"	5-#5	2,300
20'-0 to 21'-11	12"	2'-0	6'-3	#6@16"	#6x6'-6 @ 16"	#5@12"	6-#5	2,500
22'-0 to 23'-11	12"	2'-0	6'-6	#8@16"	#6x6'-6 @ 16"	#5@12"	6-#5	2,500
24'-0 to 26'-0	12"	2'-0	6'-9	#8@16"	#7x8'-0 @ 16"	#5@12"	7-#5	2,500

* Nominal Dimension

Note to Designer:
The information presented in this Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

NO		MADE BY	DATE
1	Original Issue	H. Sung	4-03
2	Increase Height	H. Sung	11-05
3			
4			

Shafi U. Hasan

Jean A. Nehme

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
BRIDGE GROUP STRUCTURE DETAIL

SOUND BARRIER WALL
(MASONRY)

SD 8.02 (2 of 2)

TRACS NO. ____ OF ____

ccccSYSTIMEccccc cccccDGNcSPECIFICATIONccccc